

**ABSTRACT****METHODS OF DIFFERENTIATING AND PROTECTING CELLS BY  
MODULATING THE P38/MEF2 PATHWAY**

The present invention provides a method of  
5 differentiating progenitor cells to produce a population  
containing protected neuronal cells. A method of the  
invention includes the steps of contacting the progenitor  
cells with a differentiating agent; and introducing into  
the progenitor cells a nucleic acid molecule encoding a  
10 MEF2 polypeptide or an active fragment thereof,  
thereby differentiating the progenitor cells to produce a  
population containing protected neuronal cells. In one  
embodiment, the MEF2 polypeptide is human MEF2C or an  
active fragment thereof.